



Photoelectrowetting

Robert Deegan

*Associate Professor of Physics and Complex Systems
University of Michigan*

**April 30, 2018 • 4 pm – 5pm
M416 (ESAM Conference Room), Tech**

In traditional electrowetting-on-dielectric devices droplet are moved about a substrate using electric fields produced by an array of discrete electrodes. I will show how a drop can be driven across a substrate with a localized light beam by exploiting the photoelectrowetting effect, a light-activated variant of electrowetting-on-dielectric. Droplet transport actuated by photoelectrowetting eliminates the need for electrode arrays and the complexities entailed in their fabrication and control, and offers a new approach for designing lab-on-a-chip applications. I present the physics of photoelectrowetting and our recent results with translation.

Note: Cookies will be served at 3:30